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10/573,579	12/26/2006	Marco Vicie	288097US0PCT	5066
22850 7590 03/18/2009 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER SIMMONS WILLIS, TRACEY A	
			ART UNIT 1619	PAPER NUMBER
			NOTIFICATION DATE 03/18/2009	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/573,579	<b>Applicant(s)</b> VICIC ET AL.	
	<b>Examiner</b> TRACEY SIMMONS WILLIS	<b>Art Unit</b> 1619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) 20,22,23,26,29-32,41-43,45-48,50 and 55-59 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19,21,24,25,27,28,33-40,44,49 and 51-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>04262006; 01312007</u> . | 6) <input type="checkbox"/> Other: _____  |

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## **DETAILED ACTION**

### ***Status of the Claims***

Applicant's election with traverse of Group I (claims 1-54) in the reply filed on December 18, 2008 is acknowledged. The traversal is on the ground(s) that no examples to distinguish the groups were provided, that determination of the special technical feature is made in light of the description, and that 37 CFR 1.475 (b)(1) was not followed.

This is not found persuasive as examples that distinguish the group is in accordance with U.S. restriction practices for applications filed under 35 USC 111(a), not applied to 35 USC 371 applications and the contribution over the prior art was not established as the lack of "special technical feature" was demonstrated (please refer to 37 CFR 1.475 (a)).

The requirement is still deemed proper and is therefore made FINAL.

Claims 1-59 are pending in the current application, of which claims 1-19, 21, 24-25, 27-28, 33-40, 44, 49, and 51-54 are being considered on their merits. Claims 20, 22-23, 26, 29-32, 41-43, 45-48, 50, and 55-59 are withdrawn from consideration at this time. This is the first Office Action on the merits of the claims.

### ***Priority***

The instant application is a national stage entry of PCT/EP04/52270 filed on September 22, 2004. The instant application claims benefit of U.S. Provisional Application No. 60/508,313 filed on October 6, 2003 and of French Patent Application No. 0311338 filed on September 26, 2003. The earliest effective U.S. filing date of the instantly claimed invention is determined to be September 22, 2004, the date of the international filing. The provisional application is in French, so Examiner cannot verify the content. The claim for benefit of the filing date of the

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provisional application is therefore denied. Examiner notes that no letter was issued to Applicant with regards to the non-English provisional; however, an English translation of the provisional, and a statement that the translation is accurate, must be filed in either the provisional application or each non-provisional application claiming the filing date of the provisional application under 35 U.S.C. 119 (e). If Applicants wish to claim the benefit of the filing dates of the provisional application, the English translation, statement that the translation is accurate, a petition to accept the translations and benefit claims, and the petition fee must be submitted. If the petition is not filed and the claim for benefit of the filing date of the provisional application is not removed, the instant application will be **ABANDONED**. See 37 CFR 1.78 (a)(5)(iv).

### ***Claim Objections***

Claim 34 is objected to because of the following informalities: The word "Claim" in line 1 of the claim is misspelled. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 6, 34-35, and 37 are rejected under 35 U.S.C. 112, second paragraph**, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the term "LCST" in line 5 of the claim. Acronyms are not permitted within claims without being defined. As written, it is uncertain what is meant by "LCST". Furthermore, "LCST" is not defined within the Specification for one of ordinary skill in the art to determine its meaning. Clarification is required.

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Claim 34 recites the phrase “chosen from hydrophilic monomers and ethylenically unsaturated monomers comprising one or more silicon atoms...”. It is unclear if “comprising one or more silicon atoms...” is in reference to both hydrophilic monomers and ethylenically unsaturated monomers, or just the ethylenically unsaturated monomers. Clarification is required.

Because claim 35 depends from indefinite claim 34 and does not clarify the point of confusion, it must also be rejected under 35 U.S.C. 112, second paragraph.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 34 recites the broad recitation hydrophilic monomers and the claim also recites ethylenically unsaturated monomers, which is the narrower statement of the range/limitation, as it is listed as a hydrophilic monomer in dependent claim 35. Clarification is required.

Claim 37 recites the phrase “the first block with a Tg of greater than or equal to 40 °C is a copolymer derived from monomers which are such that the homopolymer prepared from these

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monomers...”. It is unclear if the block is a homopolymer or copolymer derived from the monomers. Clarification is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1, 4, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 6,153,206 (2000, Anton et al) as evidenced by U.S. Patent 6,156,804 (2000, Chevalier et al).**

Anton teaches of compositions for application to the skin of a block polymer containing first and second repeat units [col 2, lines 58-62], an oil component [col 6, lines 8-9], and particulate matter [col 8, lines 60-62] used for film-forming and shine benefit [col 1, lines 60-61 and col 2, lines 55-58]. The composition also contains paraffin wax [col 9, line 56]. Example 2 teaches a lipstick with 2 wt% paraffin wax and 0.1 wt% copolymer of isobutyl methacrylate and isobornyl methacrylate [col 12].

While Anton does not explicitly teach of tensioning agents, paraffin wax has been used to firm and tone the skin as evidenced by U.S. Patent 6,156,804 (Chevalier, [col 1, lines 62-67 and col 3, line 9]).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-2, 4-5, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,153,206 (2000, Anton et al) in view of U.S. Patent 6,156,804 (2000, Chevalier, et al).**

Anton teaches of compositions for application to the skin 0.1-60% of a block polymer containing first and second repeat units [col 2, lines 58-62 and col 3, line 25], an oil component [col 6, lines 8-9], and particulate matter [col 8, lines 60-62] used for film-forming and shine benefit [col 1, lines 60-61 and col 2, lines 55-58]. The composition also contains 1-70% (carnauba) wax as particulate matter [col 9, lines 43 and 59].

Chevalier teaches of a microdispersion of wax used to prevent and/or treat wrinkles [col 1, lines 62-65]. The waxes include carnauba wax [col 3, line 4].

Anton does not teach of anti-wrinkle compositions.

One of ordinary skill in the art at the time of the invention would have been motivated to optimize the amounts of polymer and wax in the composition of Anton with a reasonable level of success to achieve the desired shine [Anton, col 1, line 60] and tone of the skin. While Anton does not explicitly teach of tensioning agents, carnauba wax has been used to firm and tone the skin as taught by Chevalier. Anton does not specifically teach of anti-wrinkle compositions, however one of ordinary skill in the art at the time of the invention would have been motivated to use the composition of Anton as an anti-wrinkle composition as application to the skin of a tensioning agent would have toned the skin and reduced wrinkles with a reasonable expectation

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of success. Therefore the invention as a whole would have been *prima facie* obvious at the time it was made.

**Claims 3 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anton in view of Chevalier as applied to claims 1-2, 4-5, and 8 above, and further in view of U.S. Patent 6,001,367 (1999, Bazin et al).**

The teachings of Anton and Chevalier are as applied above.

Anton does not teach of the recited properties of the tensioning agent.

Bazin teaches of an anti-wrinkle composition comprising a polymer system comprising a polymer of natural origin (protein and protein hydrosylates) as a tensioning agent for the treatment and reduction of wrinkles [col 1, lines 6-12 and col 3, line 53-55]. The polymer system at a concentration of 7% in water, produces greater than 1.5% retraction of isolated stratum corneum at 30 °C and 40% humidity [col 2, lines 28-30]. The polymer system of Bazin can also include pseudolatices of synthetic acrylic copolymers [col 5, lines 13-14]. *Claim 6*

One of ordinary skill in the art at the time of the invention would have been motivated to add the polymer system of Bazin in the composition of Anton with a reasonable level of success for elimination of wrinkles, particularly as the composition of Anton already contains tensioning agents. Therefore the invention as a whole would have been *prima facie* obvious at the time it was made.

**Claims 9-17, and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anton in view of Chevalier as applied to claims 1-2, 4-5, and 8 above, and further in view of U.S. Pre-grant Application Publication 2004/0014872 (Raether, et al).**



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The teachings of Anton and Chevalier are relied upon as above. Anton further teaches that the first and second repeating units have glass transition temperatures ( $T_g$ ) of 0-70 °C and 80-115 °C, respectively [col 4, lines 62-67]. Anton teaches of the first repeating unit of the block copolymers are constructed from ethylhexyl methacrylate ( $T_g = -10$  °C) [col 5, line 48] and the second repeating unit from at least one methacrylate ester monomer selected from methyl methacrylate and isobornyl methacrylate ( $T_g = 105$  °C) [col 5, lines 42 and 45]. Anton also teaches that the repeating units are present more than one time in the polymer chain and can be present in either repetitive sequence or in random sequence with other monomer units (intermediate) [col 3, lines 21-24]. The weight portions of the first and second units can vary from 2-99% of the first unit to 1-98% of the second unit [col 5, lines 3-5].

Anton does not teach of the polydispersity index.

Raether teaches of block copolymer compositions that can be used in cosmetics [pg 9, par 92], that have a preferred polydispersity index of less than about 5 [pg 2, par 19]. Raether also teaches that the transition between the two blocks is continuous creating a random or sequence of monomers constituting the blocks, between the two blocks [pg 2, par 17]. Monomer (a) includes 2-ethylhexyl acrylate, isobornyl acrylate, and methyl methacrylate [pg 3, par 36] which can be mixtures [pg 4, par 37].

"Mutual incompatibility" is defined as the blend formed from the block monomers is not miscible in the solvent that is in the majority amount of the block [Specification pg 16, lines 8-13]. While Anton does not teach of the solubility of the monomers, one of ordinary skill in the art at the time of the invention would have been motivated to optimize the amounts of monomers with a reasonable level of success to form the copolymer as recited, thereby making the

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copolymer more hydrophilic or hydrophobic in a given solvent as desired. Anton teaches of identical components used for the copolymer and one of ordinary skill in the art would have found it reasonable that the blocks taught by Anton are mutually incompatible. *Claim 9*

One of ordinary skill in the art at the time of the invention would have been motivated to prepare and optimize the copolymer to have a polydispersity index of less than about 5 as taught by Raether to provide sufficient dispersion and mechanical properties as a result of the polymerization to improve the overall stability of the composition [pg 1, pars 4 and 9-11].

*Claims 9-11*

The polydispersity index is measured as a ratio of weight-average mass (Mw) to number-average mass (Mn), Mw/Mn. The skilled artisan would have known at the time of the invention that the properties recited within claim 9-15, polydispersity index, Mw, and Mn, are all optimizable properties based on the conditions of the reaction process (time, temperature, and concentrations of polymers used). The molecular weights of the polymers as taught by Anton range from 5,000 to 300,000 [col 5, line 27] and the components of the copolymer are the same, thereby it would have been within the purview of the skilled artisan to expect the composition as taught to have recited properties.

With regards to claim 16, the temperature difference between the two Tgs is 115 °C.

With regards to claims 33-34, Anton further teaches of additional monomer units such as silicon [col 3, lines 44-46 and 48]. With regards to claim 35, the monomers as taught by Anton are ethylenically unsaturated monomers comprising at least one carboxylic function. Therefore the invention as a whole would have been *prima facie* obvious at the time it was made.

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**Claims 9, 17-19, 21, 24-25, 27-28, 36-40, 44, 49, and 51-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anton in view of Chevalier as applied to claims 1-2, 4-5, and 8 above, and further in view of U.S. Pre-grant Application Publication 2002/0076390 (Kantner, et al) as evidenced by Polymer Properties (1999, Aldrich).**

The teachings of Anton and Chevalier are relied upon as above. Anton further teaches that the first and second repeating units have glass transition temperatures (T<sub>g</sub>) of 0-70 °C and 80-115 °C, respectively [col 4, lines 62-67]. Anton teaches of the first repeating unit of the block copolymers are constructed from ethylhexyl methacrylate (homopolymer, T<sub>g</sub> = -10 °C) [col 5, line 48] and the second repeating unit from at least one methacrylate ester monomer selected from methyl methacrylate and isobornyl methacrylate (T<sub>g</sub> = 105 °C) [col 5, lines 42 and 45]. *Claims 17-19, 21, 24-25, and 36-38* Anton also teaches that the repeating units are present more than one time in the polymer chain and can be present in either repetitive sequence or in random sequence with other monomer units (intermediate) [col 3, lines 21-24]. The weight portions of the first and second units can vary from 2-99% of the first unit to 1-98% of the second unit [col 5, lines 3-5]. *Claims 39 and 40* The homopolymer monomer (ethylhexyl methacrylate) is an acrylate of formula  $\text{CH}_2=\text{CHCOOR}_3$  with  $\text{R}_3$  = a branched  $\text{C}_1\text{-C}_{12}$  alkyl group. *Claims 27 and 28*

Anton further teaches the copolymer is within an oil phase [col 2, lines 9-23] and varying amounts of water is used [col 2, lines 43-44]. *Claims 51-53*

Anton does not teach of the elected recited species 2-ethylhexyl acrylate or of colloidal silica.

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Kantner teaches of cosmetic composition which can be used for skin [pg 1, par 9] comprising a first (meth)acrylate ester monomer and a second (meth)acrylate, the various monomers having differing Tg values [pg 1, par 10]. Suitable monomers include 2-ethylhexyl acrylate and isobornyl acrylate (elected species) [pg 2, pars 17 and 19]. The copolymers provide resistance to abrasion and excellent gloss and feel [pg 1, par 9]. Kantner teaches of the copolymer made by emulsion copolymerization and by polymerization and inversion in water [pg 7, pars 77 and 80]. Colloidal silica is used as a stabilizer [pg 5, par 51].

It would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to substitute the 2-ethylhexyl acrylate for one of the monomers having a low Tg in the copolymers of Anton with a reasonable level of success for providing shine to the skin. The Tg of 2-ethylhexyl acrylate is -50 °C (see Polymer Properties attached). One of ordinary skill in the art at the time of the invention would have been motivated to use the monomers taught by Kantner [ pg 2, par 19] as the monomers overlap with those of Anton [col 3, lines 56-65 and col 4, table] and the copolymers are used for similar purpose (i.e. improved shine to the skin).

*Claims 44 and 49*

One of ordinary skill in the art at the time of the invention would have been motivated to add colloidal silica as taught by Kantner to the invention of Anton as Anton teaches that emulsifiers can also be added to the compositions [col 11, line 6]. One of ordinary skill in the art would have expected a reasonable level of success upon addition of colloidal silica to the invention of Anton, as the colloidal silica functions as a stabilizer (emulsifier). Therefore the invention as a whole would have been *prima facie* obvious at the time it was made. *Claim 49*

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With regards to the emulsion recited in claim 54, one of ordinary skill in the art at the time of the invention would have reasonably envisaged the formation of an emulsion based on the oil and water content within the composition and also based on the presence of emulsifiers as taught by Anton. Therefore the invention as a whole would have been *prima facie* obvious at the time it was made.

### ***Conclusion***

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TRACEY SIMMONS WILLIS whose telephone number is (571)270-5861. The examiner can normally be reached on Mondays to Fridays from 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, can be reached at (571)272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/T. S.W./

/MP WOODWARD/  
Supervisory Patent Examiner, Art Unit 1615